

The Strategic Importance of Job Analysis as a Basic Human Resource Management Technique

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Abstract

The analysis of jobs, skills and competencies is one of the most important techniques in human resource management. Job analysis provides the information required by virtually every human resources activity. It assists with the essential HR programmes such as recruitment, selection, training and development, performance appraisal and compensation management. It may also help organizations defend themselves in lawsuits involving employment practices, for example, by clearly specifying what a job requires if someone claims unfair dismissal. Ultimately, job analysis helps increase the value added by employees to the organization because it clarifies what is really required to perform effectively. The entire human resource management function rests on effective job analysis. However, with increasing competition, rapid technological innovations, the changing nature of organizational structure and shorter product life-cycles, its underlying assumptions are becoming increasingly questionable in today's dynamic work environment. This has led to calls for a more proactive and strategic approach to job analysis so that the procedures will continue to be relevant in today's workplace. Taking into account the importance and sensitivity of the issue of job analysis to any organization, the present study emphasize the need for a proactive and strategic approach to job analysis, present a job analysis framework and discussed implications for organizations. The study concludes with recommendations aimed at making job analysis more effective and result-oriented when tied to recruitment and selection, training and development, performance management, career management, job evaluation and the design of grade and pay structures process in the organization.

Keywords: Job analysis, Job description, Job specification, Strategic approach, Human resource management.

1. Introduction

Human resource professionals and consultants use job analysis as basic building blocks for human resource management functions, including recruitment and selection, training

and development, performance appraisal and compensation management. Job analysis may be viewed as the hub of virtually all human resource management activities necessary for the successful functioning of organizations (Cowling & Mailer, 1981; Gael, 1988a; Cole, 2002; Bohlander & Snell, 2007; Bateman & Snell, 2011; Werner, Schuler & Jackson, 2012; Suthar, Chakravarthi & Pradhan, 2014). Job analysis is sometimes called the cornerstone of human resource management because the information it collects serves so many human resource management functions. Job analysis is thus a prerequisite activity for the effective management of human resources.

However, with increasing competition, rapid technological innovation, the changing nature of organizational structures and shorter product life-cycles, many important assumptions that underlie such fundamental uses of job analysis in management are becoming questionable in today's business environment. Consequently, the tasks to be performed, and the knowledge, skills and abilities (KSAs) required for effective job performance are also becoming more volatile, and sometimes more team-based (Mirabile, 1990; Siddique, 2004; Armstrong, 2009). This has led to calls for a more proactive and strategic approach to job analysis, so that the procedures will continue to be relevant in today's workplace (Schneider & Knoz, 1989; Sanchez, 1994; Morgan & Smith, 1996; Siddique, 2004; Werner *et al.*, 2012).

The ultimate purpose of job analysis is to improve organizational performance and productivity. A proactive job analysis practices help to identify factors that greatly influence employees' motivation, employees' productivity, job satisfaction, and employment retention. As contrasted with job design, which reflects subjective opinions about the ideal requirements of a job, job analysis is concerned with objective and verifiable information about the actual requirements of a job. The job descriptions and job specifications developed through job analysis should be as accurate as possible if they are to be of value to those who make human resource management (HRM) decisions. These decisions many involve any of the HR functions-from recruitment to termination of employees. In this regard, this study is geared towards establishing the importance and role of job analysis as a basic human resource management activity that drives other human resource functions notably recruitment and selection, training and development, performance appraisal, compensation management, knowledge management, human resource restructuring, employees engagement management, employees retention management, participative management, safety and health management, legal compliance and termination of employment.

2 Literature Review

2.1 Historical Overview of Job Analysis

The history of job analysis can be traced back to Socrates in the fifth century B.C. and his description of the ideal state (Primoff & Fine, 1988). Apparently, Socrates was concerned with the work that needed to be done, and who did it, and this represented the conceptual beginnings for job analysis. It seems as if the first large scale job analysis was conducted by Diderot, an encyclopaedist. In 1747, whilst working on an encyclopaedia, he discovered that the jobs in the trades, arts, and crafts seemed incomplete and lacked a

unified purpose. He consequently investigated the nature and content of these jobs and reorganized them into specific job categories (Primoff & Fine, 1988).

However, the term job analysis did not appear in the management literature until early twentieth century. In 1916, Frederick Taylor referred to job analysis as the first of the four principles of scientific management (Ash, 1988). Taylor's job analysis procedure implicitly addressed efficiency aims in the selection, motivation, and training of the worker (Primoff & Fine, 1988). Industrial engineering also had a significant early impact on job analysis through the work of Henry Gantt and Frank and Lillian Gilbreth in the early part of twentieth century. In their efforts to increase efficiency and productivity, they introduced many refinements and techniques for applying scientific management on the factory floor to study work motions, and in doing so, examined jobs from the perspective of the elemental parts (Jeanneret, 1991; Bateman & Snell, 2011). Job analysis methods have grown considerably since the early theoretical foundations and currently includes, among others, the Position Analysis Questionnaire (PAQ), the Critical Incidents Technique (CIT), Fleishman's Job Analysis Survey (FJAS), Functional Job Analysis (FJA), and the Job Element Method (JEM) (McCormick, 1976; Palmer & Valet, 2001). Apparently, the legacy of Taylor's scientific management approach which advocated the application of scientific methods to analyze work to determine how to complete production tasks efficiently is broad and pervasive. Most important, productivity and efficiency in manufacturing improved dramatically. One of the most famous examples of the application of scientific management is the factory Henry Ford built to produce the model-T which became the first car accessible to the majority of Americans.

2.2 Job Analysis

Job analysis is a systematic process of describing and recording information about job behaviours, activities, and worker specifications. (Werner *et al.*, 2012). This supports the assertion of Armstrong (2009) who posits that job analysis focused on collecting, analyzing and setting out information about the content of jobs in order to provide the basis for a job description and data for recruitment, training, job evaluation, and performance management. In the words of Cole (2002), job analysis is a term used to describe a process of examining jobs in order to identify their main features, in particular the duties they fulfill, the results they are expected to achieve, the major tasks undertaken, and the job's relationships with other jobs in the organizational hierarchy. Brannick and Levine (2002) sees job analysis as an organized process whereby nature of a job is discovered. Similarly, Bohlander and Snell (2007) describe job analysis as the process of obtaining information about jobs by determining the duties, tasks, or activities of these jobs. Typically, the information described and recorded includes:

- the purposes of a job;
- the major duties or activities required of the job holders;
- the conditions under which the job is performed;
- the competencies (i.e, skills, knowledge and abilities) that enable and enhance performance in the job.

In a nutshell, job analysis concentrates more on what job holders are expected to do. Although issues of supply and demand are fairly 'macro' activities conducted at an

organizational level-HR planning also has a 'micro' side called job analysis. Job analysis does two things. First, it tells the HR manager about the job itself: the essential tasks, duties, and responsibilities involved in performing the job. This information is called a job description. The job description for an accounting manager might specify that the position will be responsible for monthly, quarterly, and annual financial reports, getting bills issued and paid, preparing budgets, ensuring the company's compliance with laws and regulations, working closely with line managers on financial issues, and supervising an accounting department. Second, job analysis describes the skills, knowledge, abilities, and other characteristics needed to perform the job. This is called the job specification. For accounting manager, for example, the job requirements might include a degree in accounting or business, knowledge of computerized accounting systems, prior managerial experience, and excellent communication skill (Bateman & Snell, 2011).

Therefore, job analysis is one of the most important activities of human resource management and can perform multi-functions. A regular or proactive job analysis practices according to Suthar *et al.* (2014), help to identify factors that shape the employees' motivation and job satisfaction. The ultimate purpose of job analysis is to improve organizational performance and productivity. Job analysis is an influential management tool in business and industry. There is hardly a programme of interest to human resource specialists and practitioners, whose work pertain to the interface between people and jobs that do not depend or cannot benefit from the results of an effective job analysis. An examination of the literature revealed that job analysis has provided an informational base for a wide variety of organizational and managerial functions, including among others, recruitment and selection (Wilde, 1993; Wenimont, 1988; Jenkins & Griffith, 2004; Carless, 2007; Kharabe & Joseph, 2016), training and development (Wooten, 1993; Bohlander & Snell, 2007; Bateman & Snell, 2011; Mapira *et al.*, 2013; Kharabe & Joseph, 2016), performance management (Werner *et al.*, 2012), compensation management (Taber & Peters, 1991; Armstrong, 2009; Bateman & Snell, 2011; Kharabe & Joseph, 2016), job descriptions and job specifications (Denerley & Plumbley, 1969; Cole, 2002; Armstrong, 2009; Kharabe & Joseph, 2016), Job design (Davis & Wacker, 1988; Konczak, 2007), and employment equity and affirmative action (Thancker, 1990; Simda, Taggar & Smith, 2007; Werner *et al.*, 2012). It is therefore clearly evident that job analysis has been, and will continue to be, an extremely useful management tool.

2.3 Specific Terminology in Job Analysis

In everyday conversations, people often use the word job whenever they refers to an employment situation. But when an entire system for managing human resources depends on understanding the jobs in an organization, specific terminology is needed. The precise use of several related terms facilitates clear communication of job requirements and human resource management functions.

(i) Job: The term job refers to a group of related activities and duties. Ideally, the duties of a job should consist of natural units of work that are similar and related. They should be clear and distinct from those of other jobs to minimize misunderstanding and conflict among employees and to enable employees to recognize what is expected of them.

(ii) Position: A position consists of different duties and responsibilities performed by only one employee. Human resource professionals use the term position to refer to the activities carried out by any single person or employee.

(iii) Occupation: An occupation refers to a group of jobs that involve similar work and require similar training, credentials and competencies.

(iv) Job Family: A job family refers to a group of individual jobs with similar characteristics. Where different jobs have similar duties and responsibilities, they may be grouped into a job family for purposes of recruitment and selection, training and development, compensation, or advancement opportunities.

(v) Job Design: It is the organization (or structuring) of a job to satisfy the technical-organization requirements of the work and the human requirements of the person performing the job.

(vi) Job Description: A job description is a statement of the tasks, duties, and responsibilities of a job. A job description spells out essential job functions or duties, describes the conditions in which the job is performed, and states the competencies needed as well as any special training requirements for the job.

(vii) Job Specification: A job specification is a statement of the knowledge, skills, and abilities required for the person performing the job.

(viii) Job Incumbents: The people who are currently doing the job, have the most direct knowledge about the tasks, duties, and competencies associated with the job. Incumbents usually provide input into job analysis by participating in an interview or responding to a questionnaire. Although incumbents may inflate the difficulty of their jobs, there are still good reasons to include them in the job analysis process. First, they are the source of the most current and accurate information about the job. Second, including incumbents can increase perceptions of procedural fairness and reduce resistance to any changes that might be introduced on the basis of job analysis results.

(ix) Competency Modeling: A competency is a measurable pattern of knowledge, skills, abilities, behaviours, and other characteristics that a person needs to perform work roles or occupational functions successfully. For competency modeling, the objective is to describe the competencies of successful employees for a series or progression of several jobs. Competency models are particularly career paths and developmental or training experiences that enable employees to progress along those career paths. For employees, competency models provide information about which skills they should develop to be qualified for particular jobs. Ideally, a competency model describes both competencies that are necessary for successful performance and behavioural indicators that can be used to assess an individual's proficiency on each competency.

(x) Career paths and job progressions: Career paths refer to lines of advancement in an occupational field within an organization. While job progression on the other hand refers to the hierarchy of jobs a new employee might experience, ranging from a starting job to jobs that successively require more knowledge and/or skills. When the career path is quite clear, competency modeling can help determine the level of performance that should be achieved before an employee being considered for a promotion.

2.4 Components of Job Analysis

Two major components of job analysis are identified in the literature. They are job description and job specification.

Job Description

Job description is a direct and immediate product of job analysis. It is an organized, factual statement of the duties and responsibilities of a specific job. It outlines the facts compiled from job analysis, concisely identifying and describing the contents of a job. Thus, it is a written documentation which defines the appropriate and authorized contents of a job. A job description tells you about the total requirements of the job. It tells you precisely what a job is, its purpose, the duties, activities and responsibilities attached to it, and its position within the formal structure of an organization. Grant (1988) refers to a job description as the “blueprint” of a job. This means tasks and responsibilities that must be performed as part of the job. Similarly, Adegoke (2013) defines a job description as a structured and factual state of a job’s functions and objectives. Therefore, job description generally includes duties, purpose, responsibilities, scope and working conditions of a job along with the job title and the designation of the person to whom the employees reports. According to Werner *et al.* (2012), job descriptions are part of the written contract that governs the employment relationship. A well-written job description gives the job holder and the immediate line manager a clear overall view of the position. It gives the HR manager a recruitment tool to help match the applicants with the skills, experience and competencies required on the job. It also forms a useful basis upon which to carry out performance appraisal, job evaluation, job grading and can help identify the duplication or absence of particular function or activities across the organization. In a nutshell, a job description shows both the job factors and employee factors.

The job factors include:

- (a) Job Identification- The job title, department/unit and code number.
- (b) Job Summary- This shows in a few paragraphs the major functions and tools, machinery and special equipment used.
- (c) Job Contents- Lists the sequence of operations that constitute the job, noting main levels of difficulty.
- (d) Statements showing relationship of the job to other closely associated jobs.
- (e) The training required, working hours and peculiar conditions of employment- e.g. ‘very hot’ or ‘very cold’.

The employee factors on the other hand, include sex and age, as well as physical characteristics required such as size or strength. Others are the mental abilities and emotional qualifications needed, cultural requirements (e.g. speech and knowledge of local dialect or language, etc.)

Arising from the foregoing, it is clear that job analysis provide an overview of the functions and activities undertaken by the department or the organization, help identify gaps or duplication of jobs in the organization, useful in planning and recruiting of staff, clarify duties and responsibilities, etc job descriptions are valuable tool for performing

human resource management functions. Nevertheless, several problems are frequently associated with these documents, including the following:

- (i) If they are poorly written, using vague rather than specific terms, they provide little guidance to the job holder.
- (ii) They are sometimes not updated as job duties or specifications change.
- (iii) If they are too restrictive, it can create ‘that is not my job reaction’ environment from staff.
- (iv) They can limit the scope of activities of the job holder, reducing organizational flexibility.
- (v) They may violate the law by containing specifications not related to job success.
- (vi) They sometimes creates boundaries rather than free team cooperation.
- (vii) They takes executive time as it requires regular update.

Job Specification

Job specification is an extension of the job description. It is a statement of the minimum acceptable human qualities necessary to perform a job properly. According to Ohadinma and Uwaoma (2000), job specification is the personal characteristics or qualification requirements of a job. These include education, skill, experience, special aptitude, etc. when recruiting and screening applicants, employers utilize job analysis to determine what knowledge, skills and abilities an applicant needs to perform the job. These needs are referred to as job specification (Brannick, Levine & Morgeson, 2007). Similarly, Suthar *et al.* (2014) sees job specification as a written statement of qualifications, traits, physical and mental characteristics that an individual must possess to perform the job duties and discharge responsibilities effectively.

Job specification deals with the personal aspects of the job education or qualification background, skills and abilities required to perform the job. It not only tells you about the job, but also provides a blueprint of the ‘ideal’ person to do the job. Typically, it details the personal attributes and qualities associated with successful performance of the job, for example, acceptable qualifications, experience, technical skills, physical characteristics, health and personality and any special requirements necessary to carry out a specified job. Because job specifications establish the qualifications required of applicants for a job opening, they serve an essential role in the recruiting function.

2.5 The Importance of Job Analysis

Despite possible limitations, the process of job analysis can aid managers in the following human resource decision-making points:

- (a) Assessment of where the organization stands, and where it wants to get to with regards to the tasks that must be performed, the skills required to do the work, and the roles that need to be performed.
- (b) Analysis of how the job might develop, and what qualities will be needed for the individual to develop within the organization.
- (c) Analysis of the organizational environment which involves the job that the newcomer will do, the subculture and work group they will join, the organization’s

mission, objectives, value and dominant culture, the techniques that are used, and the external environment in which the organization is located.

- (d) The entire human resource management functions rests on effective job analysis. That is, results of job analysis can be used for enhancing broader human resource strategies, activities and processes including recruitment and selection, training and development, performance appraisal, compensation management, workforce planning, safety and health management, employee and labour relations, organizational design, legal compliance and termination of employment.
- (e) Job analysis plays a vital role in making fair, transparent and defensible remuneration decisions. It allows managers to gain understanding of the content of the organization's job roles.

2.6 Purpose of Job Analysis

Bohlander and Snell (2007); Kharabe and Joseph (2016) admits that the purpose of job analysis is to determine training needs, compensation, selection procedure and performance review as shown below:

(i) Recruitment and Selection: Central to effective recruitment and selection is job analysis. Job analysis helps in determining what kind of person is required to perform a particular job. It points out the educational qualifications, level of experience and technical, physical, emotional and personal skills required to carry out a job in desired fashion. The objective is to ensure that organizations have the right number and the right kinds of people, performing tasks at the right places and at the right time all in a bid to fulfill corporate objectives. The efficiency and effectiveness of organizations depend, to a great extent, on effective recruitment and selection which is based on job analysis. Armstrong (2009) holds that recruitment and selection process come in four stages: defining requirements, attracting candidates, selecting candidates, and placing them on the job. Therefore, recruitment and selection are critical processes for organizations. In recent times, there has been growing evidence that the formation of a positive psychological contract with employees provides the basis for a positive outcome in terms of organizational commitment and motivation. Recruitment and selection are vital tools in the formation of the expectations that form such a contract. The steps involved in the recruitment and selection processes are sequential, any error made during job analysis will cascade down through the whole processes, creating greater problems elsewhere.

(ii) Training and Development: Any discrepancies between the knowledge, skills and abilities demonstrated by a jobholder and the requirements contained in the description and specification for that job provide clues to training needs. Also, career development as a part of the training function is concerned with preparing employees for advancement to jobs where their capacities can be utilized to the fullest extent possible. The formal qualification requirements set forth in high-level jobs indicates how much more training and development are needed for employees to advance to those jobs. Job analysis also helps in deciding the training content, tools and equipments to be used to conduct training and methods of training. Because training increases the knowledge and skills of employees, organizations do not really have a choice of whether to train or not, it is only a choice of method since the expectation of every employer is the evolution of a

competent, capable, highly motivated, ethical, and above all, able workforce whose hallmark would be the attainment of organizational goals and objectives.

(iii) Performance Appraisal: The requirements contained in the description of a job provide the criteria for evaluating the performance of the holder of that job. Job analysis helps to check if goals and objectives of a particular job are met or not. It helps in deciding the performance standards, evaluation criteria and individual's output. On this basis, the overall performance of an employee is measured and he/she is appraised accordingly. That is, the results of performance appraisal may reveal, however, that certain requirements established for a job are completely or not completely valid. Nevertheless, if the criteria used to evaluate employee performance are vague and not job related, employers may find themselves being charged with unfair discrimination.

(iv) Compensation Management: In determining the rate to be paid for performing a job, the relative worth of the job is one of the most important factors. This worth is based on what the job demands of an employee in terms of skill, effort, and responsibility, as well as the conditions and hazards under which the work is performed. Job analysis guides HR managers in deciding the worth of an employee for a particular job opening. Employees' compensation in whatever form remains a cost to the business and affects the profitability, to elicit the commitment of employees to the organization, the compensation package must be perceived to be fair, equitable, and consistent in comparative terms.

(v) Job Designing: The main purpose of job analysis is to streamline the human efforts that influences employee's motivational level in the organization. The structural techniques for increasing an employee's motivational potential are job enrichment, job enlargement, job rotation, re-engineering, flexitime, job embeddedness, compressed work week, job-sharing, teleworking. Job design which is based on effective job analysis enhance employees' satisfaction while increasing the human output. Job design, which is an outgrowth of job analysis, is concerned with structuring jobs in order to improve organization efficiency and employee job satisfaction.

2.7 Approaches to Job Analysis

Just as many sources provide information about jobs and the organization as a whole, many methods are used to obtain that information. The three most common methods are observation, interviews, and questionnaires. The information obtained through these methods are typically assembled to gain a full understanding of the critical component of the job and the content of the job.

(a) Observation: Observing workers as they perform their jobs provides rich information about the tasks involved. Observation may mean simply watching people work, or it may include videotaping, audiotaping, and computer monitoring. This method is most appropriate for routine administrative or manual roles but it seldom used because of the time it takes. The major limitation here is that employees who know that they are being observed may put up acts that would give false outcome of the observations. When observations of employees are used for job analysis, the observers must record all tasks performed when employees are multitasking.

(b) Individual and Group Interviews: For jobs involving tasks that are difficult to observe, observations may not be an appropriate method of job analysis. A better way to

understand some jobs and their organizational context may be to conduct interviews. Therefore, the full flavour of a job is best obtained by interviewing job holders and checking findings with their managers or team leaders. The aim of the interview should be to obtain the relevant facts about the job, namely the job title, organizational details (reporting relationships as described in an organization chart), and a list of the tasks or duties performed by the job holder (Armstrong, 2009).

Interviews can be conducted individually, or a member of employees can be interviewed all at once in a focus group. Individual interviews are useful because there is less chance that social pressures will distort the responses of employees. On the other hand, focus groups are useful because employees tend to stimulate each other to think of more ideas. Again, combining or multiple approaches to obtaining information is usually the best solution (Werner *et al.*, 2012). Interviews are applied when the job is complex. It is therefore the most common approach. The advantages of the interviewing method are that it is flexible, can provide in-depth information and is easy to organize and prepare. But interviewing can be time-consuming which is why in large job analysis exercises, questionnaire may be used to provide advance information about the job. For example, to really understand the job of a software designer who develops customized graphics programmes for commercial printers, you might interview job incumbents, their line managers, members of their product design teams, staff members who write the computer codes to implement their designs, and the customers who ultimately define their objectives.

(c) Questionnaires: Many people find it difficult to express themselves in writing about their work. questionnaires about their roles can be completed by role holders and approved by the role holder's manager or team leader. Questionnaire are useful for collecting information from many different people because they are economical, especially when administered electronically. It is highly advisable to pilot-test questionnaires before launching into a full-scale exercise. The advantages of questionnaires are that they produce information quickly and cheaply for a large number of jobs. They can also save interviewing time by recording purely factual information and by enabling the manager or analyst to structure questions in advance to cover areas which need to be explored in greater depth. However, the accuracy of results will depends on the willingness and ability of job holders to complete questionnaires.

2.8 Strategic Job Analysis

In today's competitive environment, organizations are seeking new management techniques to enhance competitiveness. The cornerstone of such techniques lies in the ability of the organization to successfully predict, and consequently plan and live with change (Weinberger, 1989). Researchers such as Lund and Hansen (1986); Werner *et al.* (2012) focused on organizational change as a result of innovations in technology and increased competition, among other factors. It is argued that the effects of these technological and other changes will be universal and apply to all organizations. Voskuil (2005); Bohlander and Snell (2007) suggest that the new knowledge, skills, and abilities will be required if jobs are to be effectively and efficiently performed in this dynamic environment. As London (1988) notes, organizations and managers need to think about

critical jobs for the future and what would have to be done to ensure that the right people, with the right knowledge, skills and abilities (KSAs), were available at the right time and place. As such, Scheider and Konz (1989) argues that if change and human resource management is all about people working at jobs, then jobs need be a, if not, the focus of strategic human resources management. Here the literature appears to be quite silent precisely with what kinds of people need to be recruited and selected and the kinds training they should actually receive are not identified. The apparent inconsistency between the assumptions of traditional job analysis and new approaches to managing employees is so great that some managers and HR professionals now ask, "Do we even need job analysis anymore?" I think the answer to this question is clearly yes. Unless employers understand the work that employees are expected to do, they cannot possibly develop an integrated system of HR policies and practices to support that work. Therefore, job analysis can be valuable tool during strategic change. Also, job analysis is essential to any organization concerned about legal compliance and its ability to defend its employment practices (Werner *et al.*, 2012). Organizations will certainly continue to use job analysis in some form as a foundation on which to build integrated human resource management (HRM) system.

In a study more directly related to job analysis, Sanchez (1994) argues that traditional job analysis is tailored to the principles of the scientific management approach which is becoming unsuitable to emerging business needs. However, he contends that despite the obsolescence of the traditional conception of job analysis, many forms of work analysis can meaningfully contribute to business competitiveness, and that, informed modification of current job analysis practices require knowledge of the underlying assumptions that have rendered tradition job analysis obsolete. Some of the underlying assumptions identified include: simplified and predetermined job responsibilities; and adversarial approach to labour-management relations; static jobs with stable knowledge, skills and abilities requirements, scarce competition and large market share; isolated work stations and minimum employee feedback; individualistic approach to employee selection; and a hierarchical approach to employee selection. Among his wide ranging recommendations, and of direct relevance to this paper, are those that relate to the reduction of future uncertainties in the environment, the use of job analysis for teamwork, and the alignment of job analysis and business strategy. These include: develop scenarios to facilitate the process of evaluating future knowledge, skills, and abilities (KSAs) demands; forecast emerging critical occupations, listing primary knowledge, skills and abilities requirements by level and function, and attempt to identify changes in recruitment and selection patterns due to new knowledge, skills, and abilities requirement ask subject matter experts (SMEs) to predict potential technological and organizational changes; revise current knowledge, skills, and abilities (KSAs) requirements in light of future changes; ask incumbents to rate their respective task inventories on scales measuring the extent to which successful completion of the task requires cooperation with others (teamwork); and identify key organizational and external relationships necessary to carry out responsibilities and consequent strategy-related knowledge, skills, and abilities (KSAs) (e.g., openness to innovation, personal influence, etc).

Furthermore, Siddique (2004) provide an intriguing look into the positive impact a competency- focused job analysis approach can have on a company's performance. Cronshaw (1998) contended that competencies are better suited to the newer, more fluid organizational structures of the late twentieth century. As we move further into the twenty first (21st) century, we see that this statement is just as applicable today. Therefore, in order for organizations to become more strategic in terms of their job analysis, Siddique (2004) holds that there is a need to start looking into competencies as opposed to tasks and knowledge, skills, and abilities (KSAs) as seen in the tradition job analysis approach. The competencies- focused job analysis emphasizes adaptability, teamwork orientation and other similar characteristics of employees considered important for successful job performance. Other competencies include:

Interpersonal skills, conflict resolution skills, innovative thinking, flexibility, decision-making ability and self-motivation. The use of a competency approach is critical for organizations wishing to develop a strategic job analysis (Mirabile, 1990; Shippmann *et al.*, Dierdorff & Wilson, 2005; Werner *et al.*, 2012; Mapira *et al.*, 2013; Kharabe & Joseph, 2016).

Job analysis will not disappear, but the procedures used will likely evolve and change to meet the new needs of organizations. The increasing popularity of competency modeling (instead of task-focused job analysis) is one example of how job analysis is evolving. Part of the appeal of competency modeling seems to be that it is more useful for identifying the core competencies and behaviours that are similar across all jobs in a department, business unit, or organization. When these are included in employees' job descriptions, competency modeling serves as a tool for defining and communicating a consistent corporate culture. In addition, Siddique (2004) argues that a competency approach or proactive job analysis can help an organization in creating a proper infrastructure by defining the tasks to be performed as well as the time lines for performing them. A regular or proactive job analysis also contributes to organizational performance by promoting positive job attitudes.

2.9 Job Analysis for Teamwork

Organizing employees into work teams is becoming an extremely popular management strategy (Jones & Schilling, 2000; Suthar *et al.*, 2014). Similarly, Sanchez (1994) contends that with vertical enlargement and horizontal enrichment, jobs have become highly dependant on one another, making teamwork a necessity, and as Brannick and Levine (2002) predict, work in the future will be accomplished by small teams of people who have rather flexible dynamic jobs. Also, Werner *et al.* (2012) contends that in a team environment, the tasks performed by a particular individual may depend on the talents and interests of the other people in the team. They posit further that the team as a whole, not the individual, is assigned duties and may held accountable for specific tasks. If the team is self-managed, the members can organize the team's work in any way they wish. There are no standard job descriptions. One of the main features of organizing work around teams is that tasks or responsibilities are mapped into teams rather than into individual persons who comprise the teams. Team members are expected, over time, to learn multiple tasks and to fill in for others when necessary. Brannick and Levine (2002)

argues that given the difficulty in analyzing specific tasks to infer the required knowledge, skills, and abilities, one solution to the problem is to select people for generic traits that are valuable for a range of jobs. Campion (1994); Armstrong (2009); Werner *et al.* (2012) contends that attention needs to be focused on knowledge, skills, and abilities (KSAs) required for the team-oriented situation itself and should include such skills as task coordination, participation, conflict resolution, problem-solving, and communication. Similarly, Sanchez (1994) suggests that organizational citizenship, cooperation, and customer-orientation behaviours be considered pertinent in job analysis for teams. As such, it is apparent that in conducting job analysis for teams, the focus should be on work-oriented approaches, in which broad behaviours are identified (Mullins & Kimbrough, 1988; Brookins, 2016).

According to Adair (1986), a team is more than just a group with a common aim. It is a group in which the contributions of individuals are seen as complementary. Collaboration, working together, is the keynote of a team activity. Woodcock (1979) contends that the characteristics of a good teamwork are: clear objectives and agreed goals; openness and confrontation; support and trust; co-operation and conflict; sound procedures; appropriate leadership; regular review; individual development and sound inter-group relations. Adair (1986) emphasizes the importance of careful selection of team members. The key factors here for individuals are not only technical or professional competencies, but also the ability to work as a team member, and the possession of desirable personal attributes' such as willingness to listen, flexibility of outlook and the capacity to give and accept trust. Team-based approaches to work have generated excitement. Used appropriately, teams can be powerfully effective as a building block for organization structure; teams increase productivity, improve quality, and reduce costs; teams also can enhance speed and be powerful forces for innovation and change; teamwork also embraces the concept of synergy.

2.9 The Imperative of Integrating Job Analysis with Organization's Strategic Plan

Strategic planning involves a set of procedures for making decisions about the organization's long-term goals and strategies (Bateman & Snell, 2011). Strategic plans focus on how the organization will position itself relative to competitors in order to achieve long-term survival, value, and growth. In order for job analysis to actually become strategic it is necessary to link the process to the strategic direction of the organization. Using Miles and Snow's (1978) strategic typology, this section of the paper will examine how an organization's strategic choice can impact the approach used in job analysis. Miles and Snow (1978) identify three organizational strategic types: defenders, prospectors and analysers. According to Miles, Snow, Meyer and Coleman (1978), each type has its own unique strategy for relating to its chosen market(s) and each has a particular configuration of technology, structure, and process that is consistent with its market strategy.

However, prospector and defenders organizations can be seen as two points on opposite ends of a spectrum. Much of the academic literature juxtapose then, while the analyser type of organization is nicely placed in a middle of the continuum, representing a combination of these two extremes. For this reason, the paper shall only focus on

prospector and defender strategic types, and the links these may have on an organization's job analysis

(i) Prospectors: Organizations that continually change the boundaries for task environments by seeking new products and markets, diversifying and merging, or acquiring new enterprises are prospectors. Aggressive organizations continuously change the boundaries of their competitive environments by seeking new products and markets, diversifying, and merging or acquiring new enterprises. In these and other ways, corporations put their competitors on the defensive and force them to react (Bateman & Snell, 2011). According to Miles *et al.* (1978), the prospector's prime capability is that of finding and exploiting new product and market opportunities. These types of organizations are seen as innovators and change agents.

As Ragburam and Arvey (1994) remarked, prospectors have a decentralized structure, low formalization, skill flexibility and staff, and train for broad skills. Based on these characteristics, organizations adopting a prospector style approach are ideal candidates for using a strategic job analysis approach. The prospector uses flexible and broad skills to complements the key ideas behind strategic job analysis due to its emphasis on generic content of jobs or work, empowerment, move to work teams, and multi-skilling (Cronshaw, 1998- Bateman & Snell, 2011). Scheneider and Konz (1989); Mapira *et al.* (2013); Mangaleswaran and Kirushantha (2015); Kharabe and Joseph(2016) contends that the goal of strategic job analysis is specification of the tasks to be performed and the knowledge, skills, and abilities (KSAs) required for effective performance of a job as it is predicted to exist in the future. This description is extremely fitting to prospectors as such organizations operate and thrive on rapid change and intense speed. Therefore, organizations which are seen as proactive "technology-push" innovators, tend to have cultures that are more outward-looking and opportunistic.

(ii) Defenders: Organizations that stay within a stable product domain as a strategic maneuver are called defenders (Bateman & Snell, 2011). The central theme behind defenders is stability (miles *et al.*, 1978). By offering limited product lines; single capital intensive technology; a functional structure; and skills in production efficiency, process engineering, and cost control, defenders set up the necessary conditions to ensure that they compete in a stable environment (Ragburam & Arvey, 1994). In addition, organizations with a defender business strategy are likely to adopt a long-term perspective, maintain internal stability; have an extensive division of labour with an emphasis on skill specialization, and recruit and train staff for narrow skills (Ragburam & Arvey, 1994). Arising from the foregoing, a traditional approach to job analysis (the specification of the tasks to be performed and the knowledge, skills, and abilities (KSAs) required for job performance of a job as it currently exists, and/or has existed in the past) may be more applicable for organizations using a defender strategy, as jobs are considered stable over time. Miles *et al.* (1978) also state that the defender's adherence to strict controls and emphasis on a top-down management approach can also be seen as being highly mechanistic. This closely mirrors that of Taylor's "Scientific Management", a situation that spawned traditional job analysis.

However, Stewart and Carson (1997) point out that modern organizations are less often structured around jobs. Self-managing teams are replacing bureaucratic hierarchies. Moreso, organizations are creating jobs that never existed and seeking more cooperative approaches to labour-management relations (Siddique, 2004). In order to survive and thrive, these organizations must adapt to changing labour force; demographics; global competition; and increasing competition due to free-trade, innovations in technology, deregulation, and fast-evolving markets (Morgan & Smith, 1996; Landry, Mahesh & Hartman, 2005; Bateman & Snell, 2011, Werner *et al.*, 2012). The evolution toward rapidly changing jobs and organizations that demand flexibility of their workers, suggests that the need for new approaches to job analysis is now an organizational reality.

2.10 Conceptual Model

It should be emphasized that a major goal of modern job analysis is to help the organization establish the job- relatedness of its selection and performance requirements. In addition, it is generally agreed that various human resources functions should be integrated into the overall strategic management process of the organization (Fisher, 1989; Cooke & Armstrong, 1990; Boxall & Purcell, 2000; Cole, 2002; Bohlander & Snell, 2007; Werner *et al.*, 2012). Once a strategic direction for the organization is chosen, human resource managers have a crucial role in designing and developing human resources management systems that will aid the successful strategic implementation (Dyer, 1985; Foulkes, 1986; Lengnick-Hall & Lengnick-hall, 1988; Wright & Snell, 1991; Pfeffer, 1994; Cooke & Armstrong, 1990; Colbert, 2004; Bateman & Snell, 2011; Werner *et al.*, 2012; Suthar *et al.*, 2014). One such function/system is the strategic job analysis, which for the purpose of this study, can be reviewed as proactive approach which help management anticipate and manage change relating to jobs. Thus, strategic job analysis means aligning current and future jobs with the strategic orientation of the organization. That is, strategic job analysis is a purposeful systematic process of collecting current and future work-related aspects of a job, within the organization's strategic context. Cross (2004) postulates that, Once job analysis has been designed and developed, managers would be able to write job descriptions and job specifications. Job analysis plays a pivotal role in the field of human resource management and is of crucial importance to other strategic functions such as recruitment and selection, training and development, performance appraisal, compensation management, employee relations, safety and health management, legal compliance and termination of employment. This can be illustrated as shown below:

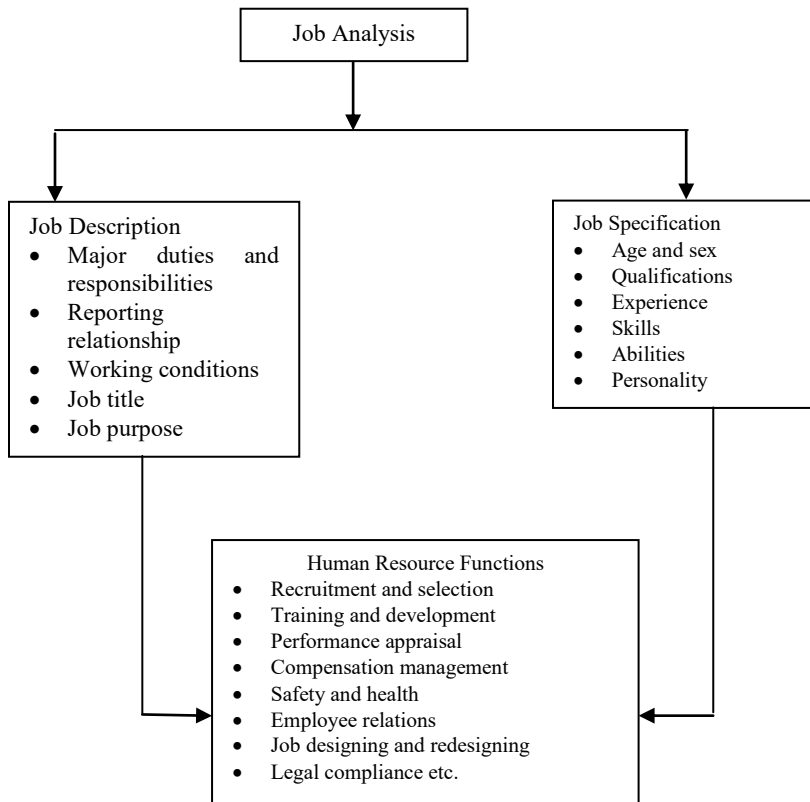


Figure 1: Job analysis framework
(Source: Author's construction, 2017)

The above model clearly depicts the necessity of job analysis as a strategic human resource management practice with potential contribution to realizing performance-based human resources management. Results of effective job analysis can be used for enhancing broad human resources management strategies, activities and processes including recruitment and selection, training and development, performance appraisal, workforce planning, organizational design and career development, etc.

2.11 Implications of Job Analysis

One of the implications of strategic job analysis relates to the validity of the tools and processes that are spawned from it and the associated legal ramifications. Hills (1981) argues that business necessity can be sufficient defence in the event of discriminatory charges and that under certain circumstances, an organization's belief that the selection device is job related may be sufficient. The condition under which this would seem appropriate is when the job in question goes to the essence of the business. Clearly, the intent of the strategic job analysis approach is not to discriminate; rather, it is a systematic process of identifying candidates' qualification or their evaluation, referral and selection process. Another point of view in strategic job analysis is that, employees may feel threatened and resist the information collection process if they are not informed. Nancy (1988) states that, an important preliminary step for the job analyst is to become familiar with the external environment and the organization, its purpose, strategies, designs, inputs (products and services). Familiarity with company, industry, and government reports about the work to be analyzed further equips the analyst to develop useful job analysis information. He posits further that for effective job analysis to be feasible, the analyst must:

- i. Evaluate how environmental challenges affect individual jobs;
- ii. Eliminate needed job requirements that can cause discrimination in employment;
- iii. Discover job elements that help or hinder the quality of work-life;
- iv. Plan for future human resources requirements;
- v. Match job applicants and job opening;
- vi. Determine training needs for new and experienced employees;
- vii. Create plans to develop employee potential;
- viii. Set realistic performance standard; and
- ix. Place employee in jobs that use their skills effectively.

Another implication of strategic job analysis also relates to recruitment and selection. Strategic job analysis, as described in this paper, goes beyond the traditional person-job match and implies the incorporation of knowledge, skills, and abilities (KSAs) and work behaviours aligned with the strategic thrust of the organization. The traditional job analysis infers knowledge, skills, and abilities solely from work behaviours associated with the current job. In addition, the traditional staffing approach is consistent with hierarchical and mechanistic organizations (Stewart & Carson, 1997). As we move to an economy in which organizations are less hierarchical, organic, and even boundaryless, a strategic or proactive job analysis approach may be more applicable. Under strategic selection and staffing, knowledge, abilities, and abilities (KSAs) determination needs to go beyond traditional requirements by incorporating knowledge, skills, and abilities, including teamwork skills, and behaviours that fit with the organization's strategy. For instance, Carson and Stewart (1996) suggested that adaptability and trainability; and self-motivation may be two factors underlying performance in team-based organizations.

However, Al-Ajmi (2001) argues that in an era of continues delayering and downsizing , one of the common problems faced when establishing a job analysis are employee fears. Employees sees a job analysis as a threat to their current jobs or pay levels or both. This

is based on the fact that the traditional job analysis was used as a means of expanding jobs while reducing the total number of employees,. Staw and Ross (2003) admits that organizations must overcome employee's fear by involving them or their representatives so that they will give accurate information, employees should be told why it should be instituted, who will initiated it, how the employees will be affected and why their inputs are critical before the procedure begins. This gives rise to a paradox: If an organization waits until information is adequate before making a decisive response it will increasingly face crises, yet, if it accepts vague information, the response will lack adequate analysis. As such, some researchers have argued that instead of waiting for sufficient information to accumulate, an organization should determine what progressive steps are feasible and act more proactive as strategic information becomes available (Harrigan, 1985; Porter, 1985; Mintzoff, 1987; Ansoff, 1990; Rice, Oconnor & Pierantozzi, 2008; Bateman & Snell, 2011; Werner *et al.*, 2012; Suthar *et al.*, 2014).

Significant differences between the present and predicted future states imply either rapid changes to current jobs or creation of jobs that do not exist. Cronshaw (1998) asks can job analysis be used to describe a job that isn't there yet (strategic job analysis)? In such instances, subject matter experts (SMEs) (the people used as sources of information about specific jobs) may be used to define behaviours, and consequent knowledge, skills, and abilities required for effective performance of a job as it is predicted to exist in the future. Fig.2 illustrates this process and its link to human resource management functions as shown below.

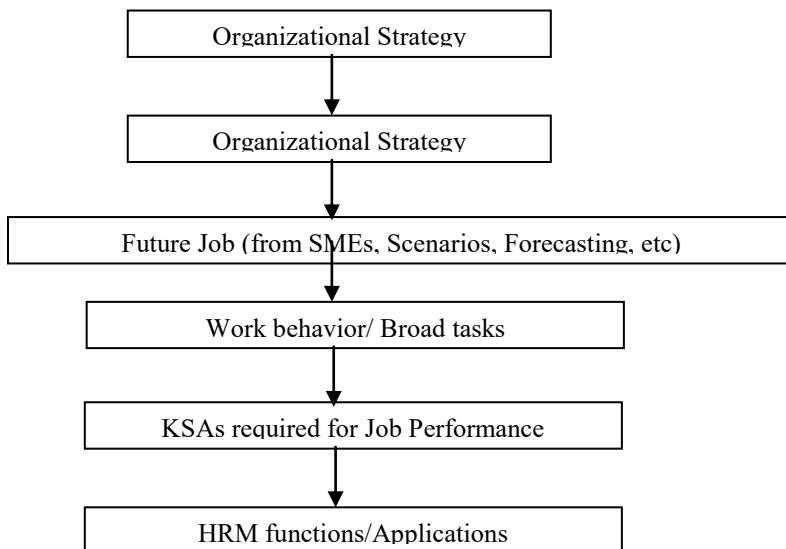


Figure 2. SJA for jobs that for not exist or those rapidly changing.

A few significant differences from the traditional approach are evident. Of particular interest is the fact that after future jobs are predicted, SMEs determine broad work behaviours, rather than specific tasks and functions. Furthermore, these behaviours are best ensured through an emphasis on broad knowledge, skills, and enduring abilities.

It is evident that basic KSAs pertinent to the occupation will continue to be important. However, specific skills will be the most susceptible to change. As a consequence, it is argued that employers should focus more on enduring abilities such as adaptability or flexibility, ability to handle ambiguity and stress, ability to learn (and relearn), creativity and problem-solving abilities, and ability to work cooperatively with peers (Bohlander & Snell, 2007; Bateman & Snell, 2011; Werner *et al.*, 2012). It is only after a comparison of current and possible future jobs that the organization can set its strategic job analysis objectives. The objectives should take into consideration the overall strategic thrust of the organization, guide the development of strategic job analysis plans and the allocation of resources. However, the strategic job analysis must be continuously evaluated through such feedback mechanisms as employee adaptation and performance. The human resources functions, through a proactive or strategic job analysis increases the likelihood of the organization's survival and success.

2.12 Policy Recommendations

The following are recommended to ensure a proactive job analysis practices that identify factors to shape the employees' motivation and job satisfaction:

- (1) The employment conditions of an organization should be flexible to accommodate rapid changes in today's workplace.
- (2) The organization's job analysis should incorporate general and broad traits instead of specific skills and behaviours.
- (3) Organizations should focus on modern job design activities by considering the factors like: job related skill, employee motivation and well-being, organizational goal-oriented functions and responsibilities, transparent job performance standards as well as free from undue influence.
- (4) There should be a recruitment and selection policies in the organization which must be based up corporate goals and needs. The criteria for selection and preferences should be based on merit and job analysis process.
- (5) There should be practice of equal opportunity in recruitment and selection policies devoid of discrimination.
- (6) Organizations should focus on teamwork, adaptability, conflict resolution skills, innovative thinking, decision-making ability and self-motivation when designing and developing strategic job analysis to enhance positive job attitudes.
- (7) There should be suitable working conditions, good and enticing remuneration package offered by the organization based on the demands of an employee in terms of skill, effort and responsibility.
- (8) The process of job analysis must be regular or proactive under unstable economic environment and labour market conditions.

2.13 Conclusion

The entire human resource management functions rests on effective job analysis. Ultimately, job analysis helps increase the value added by employees to the organization because it clarifies what is really required to perform effectively. Job analysis has always been, and will continue to be in the foreseeable future a valuable informational tool in human resource management practice. Strategic job analysis, as proposed in this paper, is a necessary step in the evolution of traditional job analysis so that it can meaningfully tackle the emerging needs of contemporary organizations. A well established job analysis has positive implications on employees' motivation and job satisfaction; organizational performance and effectiveness; and growth market share and market value of an organization. A regular and proactive job analysis help employee direct their energies to the most important aspect of the job. For line managers and HR managers, job analysis serves as a guide to performance management and basic building blocks for designing pay policies and training programmes.

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